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4. (Amended) An electrochemical transistor device according to claim 1, in which at least one of said source and drain contacts and gate electrode(s) is formed from the same material as the electrochemically active element.

- 6. (Amended) An electrochemical transistor device according to claim 4, in which the source and drain contacts and the electrochemically active element are formed from a continuous piece of said material comprising an organic material.
- 7. (Amended) An electrochemical transistor device according to claim 1, in which said transistor channel retains its redox state upon removal of the gate voltage.
- 8. (Amended) An electrochemical transistor device according to claim 1, in which said transistor channel spontaneously returns to its initial redox state upon removal of the gate voltage.
- 10. (Amended) An electrochemical transistor device according to claim 1, in which said organic material is a polymer.
- 14. (Amended) An electrochemical transistor device according to claim 1, in which said organic material further comprises a polyanion compound.



Application No. <u>Unassigned</u>
Attorney's Docket No. <u>003300-761</u>
Page 3

No

- 16. (Amended) An electrochemical transistor device according to claim 1, in which said solidified electrolyte comprises a binder.
- 18. (Amended) An electrochemical transistor device according to claim 1, in which said solidified electrolyte comprises an ionic salt.
- 19. (Amended) An electrochemical transistor device according to claim 1, which is self-supporting.
- 20. (Amended) An electrochemical transistor device according to claim 1, which is arranged on a support.

25. (Amended) A process according to claim 22, in which device said organic material comprises a polymer, which process comprises deposition of said polymer on a support through *in situ* polymerisation.

26. (Amended) A process according to claim 22, comprising patterning of any one of said contacts, electrode(s) and electrochemically active element using a subtractive method.

Please cancel Claim 30 without prejudice or disclaimer.

Please add the following new Claims 31 to 35.

31. (New) An electrochemical transistor device according to claim 5, in which the source and drain contacts and the electrochemically active element are formed from a continuous piece of said material comprising an organic material.

- 32. (New) A process according to claim 23, in which device said organic material comprises a polymer, which process comprises deposition of said polymer on a support through *in situ* polymerisation.
- 33. (New) A process according to claim 24, in which device said organic material comprises a polymer, which process comprises deposition of said polymer on a support through *in situ* polymerisation.
- 34. (New) A process according to claim 23, comprising patterning of any one of said contacts, electrode(s) and electrochemically active element using a subtractive method.
- 35. (New) A process according to claim 24, comprising patterning of any one of said contacts, electrode(s) and electrochemically active element using a subtractive method.